

Cowley County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/25/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 27 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Cowley County economy.¹

These 27 sectors have a total direct output of approximately **\$2.1 billion** and support **2,853 jobs** in Cowley County. Running the model for all 27 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Cowley County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	2852.5	14.32%	\$705,732,361	38.92%	\$2,123,230,266
Indirect Effect	1153.6	5.79%	\$82,937,435	4.57%	\$173,351,315
Induced Effect	671.9	3.37%	\$41,945,251	2.31%	\$76,729,312
Total Effect	4678.0	23.49%	\$830,615,047	45.81%	\$2,373,310,894

As shown in the above table, agriculture, food, and food processing sectors support **4,678 jobs**, or **23.49%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 27 agriculture, food, and food processing sectors is approximately **\$830.6 million**, or **45.81% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the animal, except poultry, slaughtering sector is the top employer with **717 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Cowley County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Animal, except poultry, slaughtering	716.5	\$470,792,798
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	715.5	\$49,381,063
Flavoring syrup and concentrate manufacturing	488.0	\$1,374,117,187
Support activities for agriculture and forestry	238.9	\$4,034,557
Truck transportation	219.5	\$24,286,343
Wholesale trade	172.0	\$35,162,613
Grain farming	141.0	\$30,753,611
Landscape and horticultural services	125.2	\$5,222,194
Flour milling	108.7	\$126,750,734
Monetary authorities and depository credit intermediation	107.2	\$21,890,775

The flavoring syrup and concentrate manufacturing sector directly contributes approximately **\$1.37 billion** to the Cowley County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Flavoring syrup and concentrate manufacturing	488.0	\$1,374,117,187
Animal, except poultry, slaughtering	716.5	\$470,792,798
Flour milling	108.7	\$126,750,734
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	715.5	\$49,381,063
Wholesale trade	172.0	\$35,162,613
Grain farming	141.0	\$30,753,611
Truck transportation	219.5	\$24,286,343
Meat processed from carcasses	46.5	\$22,257,962
Monetary authorities and depository credit intermediation	107.2	\$21,890,775
Rail transportation	37.9	\$17,756,444

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Cowley County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	22.7	\$14,190,099.72
Grain farming	141.0	\$30,753,610.61
Vegetable and melon farming	0.1	\$19,635.08
Fruit farming	2.2	\$134,844.77
Tree nut farming	0.8	\$85,898.26
Greenhouse, nursery, and floriculture production	1.0	\$103,973.38
Cotton farming	40.5	\$6,547,934.53
All other crop farming	64.1	\$2,984,335.18
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	715.5	\$49,381,061.55
Dairy cattle and milk production	13.3	\$3,687,410.35
Poultry and egg production	0.7	\$398,761.12
Animal production, except cattle and poultry and eggs	11.0	\$806,171.77
Commercial logging	18.6	\$491,459.64
Commercial hunting and trapping	17.9	\$352,350.32
Support activities for agriculture and forestry	238.9	\$4,034,557.34
Flour milling	108.7	\$126,750,732.42
Confectionery manufacturing from purchased chocolate	7.0	\$2,081,290.96
Animal, except poultry, slaughtering	716.5	\$470,792,816.16
Meat processed from carcasses	46.5	\$22,257,963.18
Bread and bakery product, except frozen, manufacturing	17.4	\$2,097,489.36
Frozen cakes and other pastries manufacturing	1.1	\$168,814.82
Flavoring syrup and concentrate manufacturing	488.0	\$1,374,117,187.50
Wineries	1.4	\$439,580.83
Other leather and allied product manufacturing	2.5	\$377,910.52
All other industrial machinery manufacturing	3.1	\$782,685.76
Veterinary services	46.7	\$4,169,514.18
Landscape and horticultural services	125.2	\$5,222,193.72

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Cowley County, the retail sector was omitted.